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Review article

Building a Management System for a Medical Organization: Theoretical and Methodological Aspects

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Abstract

The viability of an organization and its effectiveness are directly proportional to its ability to adapt to the external environment, flexibility and focus on continuous improvement.

This research discusses theoretical and methodological approaches to building an effective management system in medical organizations. The study's methodology was based on both classical management theories of Frederick Winslow Taylor, Henri Fayol and Max Weber and on the modern management theories of Peter Drucker and Herbert Simon.

Keywords: *healthcare management, scientific management, administrative management, bureaucratic management.*

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Introduction

As known, methodological approaches to the construction of management systems in social organizations, created by government, presuppose the presence of fundamental scientific substantiation from the standpoint of modern management theories [1]. Effective management of the interaction processes between members of such organization, the harmonious development of intra-organizational relations, the growth and development of the organization itself and the strengthening of its business reputation in society – all these become possible under the condition of the formation and functioning of the organizational management system, which in practice implements well-known classical basic principles and provisions of the known management theories. Relying on the relevant theoretical provisions is necessary while building the organizational structure of management and business process, as well as during formation of planning, motivation and control systems [2].

Theoretically, a competent justification of the management system being built in these organizations, as it turns out, can serve as the basis for the correct management of all organization's activities and can ensure the achievement of its goals. The created management system should automatically order the main priorities of each of such organizations [2,3].

It is known that the general foundations for the formation

Scientific management theory

When it comes to the principles of scientific management, which should underlie the developed management system of a social organization, first of all, researchers turn to the theoretical sources of the formation of these principles, which is a theory of scientific management developed by F.Taylor [7,8]. The most important premise of the theory of scientific management is that the productivity should be studied using scientific approaches.

Taylor identified four basic principles of scientific management:

- 1) practical methods of work should be replaced by methods based on the scientific study of problems;
- 2) individual workers should be selected, trained and developed to perform specific tasks, rather than leaving them to their own for training by their own;
- 3) workers should be given clear tasks and instructions to follow, and then they should be supervised while performing them. This requires collaboration between workers and leadership to ensure that scientifically measured tasks are carried out.
- 4) equally divide the work between managers and workers, so that the managers plan work scientifically, and workers perform actual tasks [7].

Taylor's principles focused on improving productivity. He suggested that management should scientifically measure productivity, develop best practices for increasing productivity, and set high goals for workers. This was different from simply incentivizing workers, such as higher wages or promotions, to increase productivity, instead it allows workers to decide how to get there. Moreover, Taylor also somewhat idealistically believed that the interests of workers, managers and owners

Administrative management theory

The theory of administrative management was developed by Henri Fayol in the early 1900s and is considered very relevant even nowadays. Fayol created fourteen principles

of social organizations and the concepts of their management were developed interdisciplinary, that is, at the intersection of management, sociology, economics, jurisprudence, etc. [4].

Since the 20th century, there have been significant changes in the conditions for the functioning of organizations and much new has been introduced in the development of views, scientific concepts and management practice itself [5]. The enlargement of organizations, the separation of the management function from property, the evolution of the exact sciences and human sciences - all these processes today can serve as the basis for the development of a scientific approach to formation the management of organizations and the use of scientific principles and methods of managing them. For this, the developers have various scientific ideas, conclusions and recommendations of schools that study the patterns of building organizations. They are related to the methodology for developing incentives for the functioning of an organization, human relations, social systems, division of functions and responsibilities, and managerial decision-making [3-5].

The purpose of the review is to study the theoretical provisions and methodological foundations of the basic elements of a medical organization, referring to the principles of scientific management.

are interrelated and should be aligned. The main goal of management should be to ensure the maximum prosperity of the employer, combined with the maximum prosperity of each employee [9-12].

He also raised controversies between man and machine, saying things like in the past, man was first, and in the future, the machine should be first. He strove to remove all possible brain work from the people and tried to transfer as many actions as possible to machines [7,9,10].

However, opponents of the theory argued that scientific management requires an extremely high division of labour, which requires minimal skills. As a result, workers had no incentive to grow and develop at work. Employees of modern companies have a higher level of education and are better aware of their field of activity, so they are more actively involved in decision-making processes [11]. Taylor's principles seem to suggest that employees of a bygone era performed only simple work tasks and did not need a lot of knowledge and skills to get their jobs done.

Additionally, one of the principles of scientific management theory that is not generally accepted today is the idea that managers strictly control while employees just work.

In modern organizations, many companies still use Taylor's basic theories of scientific management in organizing and designing company's structure, although many managers and technologists do not necessarily adhere to the hypothesis underlying Taylor's theory [7,8]. This theory has had a huge impact on how companies operate and has been able to create a more balanced pay system, better training, and a more efficient workforce.

that, in his opinion, laid the foundation for strong and successful companies. The grouping of these principles according to different criteria is given in Table 1.

Table 1 - Grouping of A. Fayol's principles [8]

Structural Principles	Process Principles	Principles of result
<ul style="list-style-type: none"> - Division of Work - Unity of Command - Unity of Direction - Centralization - Balancing Authority and Responsibility 	<ul style="list-style-type: none"> - Equity - Discipline - Remuneration - Scalar Chain - Esprit De Corps 	<ul style="list-style-type: none"> - Order - Initiative - Stability of Tenure of Personnel - Subordination of Individual Interests to the General Interest

It is important to know that Fayol agreed with many of Taylor's ideas, but the main difference was that Taylor focused on the process of getting the job done most efficiently, and Fayol on the organizational structure of the company as a whole.

Some of Fayol's principles included a clear division of labour, ensuring that each employee has only one-line manager to report to, and a healthy relationship between manager and employee. Another important part of Fayol's theory of administrative management is the idea that everything in a company should be aligned with organizational goals. Fayol believed that organizational structure is vital to the success and productivity of a company [7-9].

The disadvantage of the theory is the inability to cover the fundamental management aspect such as the promotion of

vertical and horizontal communication [11-13].

Fayol's theory of administrative management was based on a military context, not a business one. Thus, the theory emphasizes the commanding the offices, rather than management of employees [8].

Nevertheless, Fayol's theory is widely used in modern business. This is because managers believe that some of Fayol's principles of leadership are important for the management of organizations [12,13].

Moreover, management theory helps to define best practices for managing organizations and achieving predetermined goals and objectives.

Bureaucratic management theory

The theory was developed by Max Weber in the late 19th century. Weber worried that authority does not depend on experience and ability, but depends on the social status. Because of this, managers were not loyal to the organization. Organizational resources were not used to achieve the goals of the organization, instead they were used in the interests of owners and managers [14]. Weber was convinced that organizations based on rational authority, where authority is given to the most competent and qualified people, would be more effective than organizations based on who you know [14-17]. Weber called this type of rational organization as bureaucracy.

Weber identified six rules for bureaucracy.

1. The rule of the hierarchical management structure, in which the lower level is controlled and subordinated to the higher level. Powers and responsibilities should be clearly defined for each position.

2. The rule of division of labour, in which tasks must be clearly defined, and employees acquire skills by specializing in one business.

3. The rule of a formal selection process, in which selection and promotion is based on experience, competence and technical qualifications demonstrated by examinations, education or training. There should be no nepotism.

4. Rule of career guidance, in which management should be separated from property, and managers are career employees. Their protection against arbitrary dismissal must be guaranteed.

5. Formal rules and regulations by which they are documented to ensure reliable and predictable behaviour. Managers must rely on formal organizational rules in dealing with employees.

6. The rule of impartiality, in which the requirements of impersonality apply to everyone equally. There should be no preferential treatment or favouritism [14].

Thus, Weber believed that bureaucracy would lead to the highest levels of efficiency, rationality, and worker satisfaction. Moreover, he thought that bureaucracy was so logical that it could transform an entire society. However, Weber did not expect that each of the bureaucratic characteristics can also have some negative consequences [18,19]. For example, division of labour results in specialized and highly skilled workers, but it can also lead to boredom. Formal rules and regulations lead to uniformity and predictability, but they can also result in excessive procedures and bureaucratic delays. Despite potential problems, today bureaucracy is very common in most large organizations [17-21]. Almost every large corporation uses it.

Today the term «Bureaucracy» has acquired a negative connotation. This is due to excessive paperwork, irresponsibility, apathy, and organization inflexibility. This is unfortunate, as Weber's ideas spread throughout the world and changed the way organizations are managed and organized.

Administrative Behaviour Theory

The theory was developed by Herbert Simon and aims to describe the process, including the business processes in the organization in which people work. He explained the processes by which purpose specificity and formalization contribute to rational behaviour in organizations [22].

Simon argued that the purpose of the organization affects the internal management of the company. A specifically established goal helps to clearly define the acceptable or unacceptable form of the solution, on which internal management depends, including the organizational structure and business processes [22-24].

According to the decision-making model, information contains both objective quantitative data and opinions and judgments of various people. The review process and its results are influenced by the policy and culture of the organization, which limits the number of options. The choice of the option completes the three-stage scheme of Simon [22]. It is necessary to inform the subordinates about the chosen decision, and those who implement the adopted decision about the developed criteria. The process ends with the stages of monitoring, control, and assessment of how the situation has improved.

The extended decision-making process model [24]:

1. Indicate (feel) the presence of a problem;
2. Formulation of the problem;
3. Formation of criteria (SMART);

4. Generation of options;

5. Evaluation of each option;

6. Choice of options. SMART - S (specific), M (measurable), A (achievable), R (relevant), T (consistent).

Herbert Simon has a special approach to the problem of management effectiveness. Management assessment is based on the rationality of the choices that people make from available or alternative actions [25-27]. In this context, the assessment can be divided into two parts:

1. What are the goals according to which a certain plan will be implemented (i.e. agreement or disagreement with the value premise on which the plan is based);

2. How effective the plan will actually be (assessing the correctness of the evidence contained in the plan) [25].

Simon's theory emphasizes the importance of principles and established rules for maintaining rational behaviour within the company [28,29].

Conclusion

In conclusion, from the point of view of the theoretical context, it can be stated that theory plays an important role in building an effective management system in organizations, including social ones, and can serve as the basis, first of all, for the appropriate management of the organization's activities and ensure the achievement of its goals. Moreover, reliance on the relevant theoretical provisions is necessary in building the organizational structure of management and business processes,

as well as in the formation of planning, motivation and control systems.

At the same time, it should be noted that in modern conditions there is no universal theory of management and organizational structure for a company. What might work effectively for one organization may not matter for another one.

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Медициналық ұйымның менеджмент жүйесін құру: кейбір теориялық-әдістемелік аспектілері

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Түйіндеме

Кез-келген ұйымның ұзақ әрі сапалы жұмыс атқаруы оның сыртқы ортаның жылдам өзгеру шарттарына бейімделе білуіне, икемділігі мен үнемі жетілуге дайындығына тікелей байланысты.

Бұл мақалада медициналық ұйымдарда менеджмент жүйесін қалыптастырудың теориялық-әдістемелік жолдары қарастырылған. Жұмыстың негізгі әдістемелік көздері ретінде менеджмент теориясының классиктері Фредерик Тейлордың, Анри Файольдің және Макса Вебердің, сондай-ақ, заманауи менеджмент теоретиктері Питер Друкер мен Герберт Саймонның еңбектері салыстыра талқыланды.

Түйін сөздер: денсаулық сақтау саласындағы менеджмент, ғылыми менеджмент, әкімшілік менеджмент, бюрократиялық менеджмент.

Построение системы менеджмента медицинской организации: некоторые теоретико-методологические аспекты

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Резюме

Жизнеспособность организации и ее эффективность прямо пропорционально связаны с ее умением адаптироваться во внешней среде, гибкостью и нацеленностью к постоянному совершенствованию.

В данной рукописи рассмотрены теоретико-методологические подходы к построению системы менеджмента в медицинских организациях. Методической основой данной работы стали научные труды классиков теории менеджмента: Фредерика Тейлора, Анри Файоля, Макса Вебера, а также теоретиков современного менеджмента Питера Друкера и Герберта Саймона и других теоретиков.

Ключевые слова: менеджмент в здравоохранении, научный менеджмент, административный менеджмент, бюрократический менеджмент.